

Selection & Specification Data

Generic Type	Single package, water-based, flexible mastic fire protective coating for cables and cable trays.
Description	A water based mastic that can be applied to electrical cables to retard fire propagation. Once applied, it meets code and insurance requirements for interior and exterior use. It provides a hard and flexible surface that will not dust, flake, or spall.
Features	<ul style="list-style-type: none"> • Flexible • Hard, dust free surface • Allows easy replacement of cables • Water-based product, low odor • Asbestos-Free – complies with EPA and OSHA regulations • Factory Mutual – Tested and approved • Does not de-rate cables • Weathering – Approved for exterior use • Quality Manufactured – under strict Carboline quality standards • Provides protection at 1/16" Dry Film Thickness
Finish	Textured finish varies depending on the method of application.
Primers	Primer is not required.
Topcoats	Generally not required. In severely corrosive atmospheres, consult Carboline Technical Service for selection of the coating most suitable for the operating environment.
Dry Film Thickness	Applied at 1/16" (1.6 mm) dry film thickness, wet film thickness at 1/8" (3mm) to prevent propagation of fire along grouped electrical cable. At higher thickness will also provide moderate fire endurance.
Temperature Resistance	Continuous: 195°F (91°C) Non-Continuous: 220°F (104°C)

Physical Data (Typical Values)

Color	Non-Uniform	Gray (standard) Brown (non-standard)
Weight per Gallon		10.6
Durometer Hardness (Shore D)	ASTM D2240	30-40
Flexibility		Excellent
Abrasion Resistance		Very Good
Impact Resistance		Excellent
Ampacity	EPS 96202	No De-Rating
Vibration Resistance		Excellent
Flame Spread	ASTM E84	19
Smoke Development	ASTM E84	44
Flashpoint (Setaflash)		>300°F (148°C)
Solids by Volume		53% ± 2%
V.O.C.		0.24 lb/gal
Coverage ⁽²⁾ Per Gallon		13.1 ft ² @ 1/16" dry.
Shelf Life		18 Months
(1) Air dry at ambient conditions until constant weight. Do not force dry. Use ASTM E605 Positive Bead Displacement.		
(2) Material losses during mixing and application will vary and must be taken into consideration when estimating job		

Test reports and additional data available upon written request.

CHEMICAL RESISTANCE GUIDE:

Exposure	Splash and Spillage	Fumes
Acids	Fair	Very Good
Alkalies	Fair	Very Good
Solvents	Poor	Good
Salt	Very Good	Excellent

INTUMASTIC® 285

Approvals

INTUMASTIC 285 has been tested and approved by Factory Mutual Research Corporation at 1/16" (1.6 mm) dry thickness, and evaluated by Sandia Laboratories in tests sponsored by the U.S. Nuclear Regulatory Commission using both propane and diesel fueled fires. Copies of both the Factory Mutual and Sandia Laboratories' test reports are available upon request.

Ampacity tests run by Factory Mutual show "No Electrical Derating necessary when a cable is coated (and cured properly) with INTUMASTIC 285." The temperature attained was well below the maximum temperature rating of the cable insulation. Heat transfer calculations should be used to calculate derating requirements of large groups of conductors.

Factory Mutual Research Corp.

Sandia Labs

- Diesel (Cable Tray)
- Propane (Cable Tray)

Electrical Power System

- Ampacity - No derating of cables required
- Report EPS 96202

Fire Retardant coating for Electrical Power and Control Cables at 1/16" dry film thickness.

Packaging, Handling & Storage

Shipping Weight (Approximate)	5 gallon	56 lbs. (25.45 kg)
Storage	Material should be kept dry, covered, and off of the ground.	
Storage Temperature & Humidity	40°F to 110°F (4.4°C to 43.3°C) Keep from freezing. 0 to 100% relative humidity	
Shelf Life	18 Months	

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**



350 Hanley Industrial Court, St. Louis, MO 63144-1599
314/644-1000 314/644-4617 (fax) www.carboline.com

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